#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



### 

## (43) International Publication Date 16 June 2005 (16.06.2005)

#### **PCT**

# (10) International Publication Number WO 2005/054106 A1

- (51) International Patent Classification<sup>7</sup>: B65H 67/02, 49/20, 65/00, 69/06, D02J 1/08, 1/16, D02G 3/32
- (21) International Application Number:

PCT/IT2004/000650

(22) International Filing Date:

25 November 2004 (25.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

E.i.g.ioi

- (30) Priority Data:
  BO2003A000727 2 December 2003 (02.12.2003) IT
  FI2004A000089 16 April 2004 (16.04.2004) IT
- (71) Applicant (for all designated States except US): GIUDICI S.p.A. [IT/IT]; Via G. Salvemini, 3, I-60035 Jesi, Ancona (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GRASSI, Nerino [IT/IT]; Via Solferino 55, I-46043 Castiglione Delle Stiviere, Mantova (IT). GORGAINI, Samuele [IT/IT]; Via Piave 22, I-46042 Castel Goffredo, Mantova (IT).
- (74) Agents: Mannucci, Michele et al.; Uff. Tecn.Ing. A.Mannucci S.r.l., Via della Scala 4, I-50123 Firenze (IT).

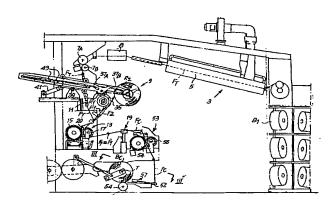
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD AND DEVICE FOR THE PRODUCTION OF A COVERED ELASTIC YARN AND FOR AUTOMATIC REPLACEMENT OF FEEDS SPOOLS



(57) Abstract: The device comprises in combination: a first interlacing jet (19); a feed path of the covering yam (FT) and a feed path of the elastic: yarn (F1; F2) towards the first interlacing jet; supporting means (37A, 37B) for spools of elastic yarn (R1, R2); winding members (54) to wind the composite yarn (FC) on the cop being formed (BC); an interruption device to interrupt feed of composite yarn to said cop being formed and start winding the composite yarn on a new winding tube. The supporting means for the spools of elastic yarn are suitable to support at least a first spool of elastic yarn and at least a second spool of elastic yarn; associated with said first interlacing jet are a retaining member (20) to withhold an initial free end of the elastic yarn of said second spool and a deflecting element to withhold an initial portion of the second elastic yarn during delivery of the first elastic yarn to the interlacing jet; a sensor to detect interruption of feed of said first elastic yarn to said first interlacing jet; a control to control release of the initial portion after interruption of feed of the first elastic yarn has been detected.



•

### WO 2005/054106 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.